



City of Burbank - COMMUNITY DEVELOPMENT DEPARTMENT
BUILDING DIVISION
Permit Requirements:
RESIDENTIAL LIGHTING STANDARDS

PERMIT APPLICATION REQUIREMENTS: For residential buildings, all of the lighting requirements are mandatory. The altered lighting components and any newly-installed equipment shall meet the mandatory Building Energy Efficiency Standards and inspection requirements in Sections 119, 130, and 150(k). Existing luminaires that are not being touched may stay in place.

Scope: In addition to low-rise residential, the Residential Lighting Standards apply to dwelling units in high-rise residential and hotel/motel guest rooms. The other areas in high-rise residential and hotels/motels must comply with Nonresidential Lighting Standards.

Luminaires are classified as high efficacy or low efficacy:

High efficacy luminaires contain pin-based sockets, such as compact fluorescent or linear fluorescent lamps with electronic ballasts. Some screw socket types, however, are high efficacy, such as metal halide and light emitting diode (LED) lamps specifically rated for high intensity discharge (HID) lamps. Other types of high efficacy lamps are high pressure sodium (a type of HID) and induction lighting.

Low efficacy luminaires include all conventional medium screw-based sockets, low voltage incandescent, halogens, track lighting of any type, LED lighting which has not been certified as high efficacy, and mercury vapor lamps. The wattage of electrical boxes finished with a blank cover or where no electrical equipment has been installed and the box can be used for a luminaire or a surface mounted ceiling fan shall be calculated as 180 watts for low efficacy lighting per electrical box.

Kitchens – Kitchen lighting includes areas adjacent to the kitchen such as dining and nook areas if they are not separately switched from the kitchen lighting, but does not include lighting internal to cabinets.

- At least half the lighting wattage of the luminaires shall be high efficacy. There are no limits to the total watts that can be installed in a residential kitchen.
Exception: Up to 50 watts for dwelling units less than or equal to 2,500 sq. ft., or 100 watts for dwelling units larger than 2500 sq. ft. may be exempt from the 50% high efficacy requirement when all the following conditions are met:
 - All low efficacy luminaires are controlled by a manual-on occupant sensor, dimmer, EMCS, or a multi-scene programmable control system, and
 - All permanently installed luminaires in garages, laundry rooms, closets greater than 70 sq ft, and utility rooms are high efficacy and controlled by a manual-on occupant sensor.

Cabinet Lighting shall use no more than 20 watts per linear foot.

Switching Devices

- All low efficacy luminaires shall be switched separately from high efficacy luminaires.
- All exhaust fans shall be switched separately from lighting, except for a fan with integral lighting where the lighting system can be manually turned on/off.
- A lighting circuit controlled by more than one switch where a dimmer or manual-on occupant sensor has been installed shall meet the following:
 - No controls shall bypass the dimmer or manual-on sensor function
 - The dimmer or manual-on occupant sensor shall comply with Sec.119

Recessed Luminaires in Insulated Ceilings

- Be listed for zero clearance insulation contact (IC) so that insulation can be placed over them.
- Labeled as airtight with leakage less than 2.0 cfm, except for exhaust fans.
- Sealed with gasket or caulk between the housing and ceiling, and shall have air leak paths between conditioned and unconditioned spaces sealed with a gasket or caulk. An exhaust fan shall be sealed between the fan housing and the ceiling.
- The ballast shall be rated for minimum 300,000 hours and have a ballast factor of not less than 0.90 for non-dimming and 0.85 for dimming.
- Allow ballasts to be accessible from below the ceiling for maintenance.

Bathrooms, Garages, Laundry Rooms, Closets, and Utility Rooms: All permanently installed luminaires shall be high efficacy or shall be controlled by a manual-on vacancy sensor. Closets less than 70 sq ft are exempt from this requirement.

All Other Rooms and Areas: Permanently installed luminaires shall be high efficacy or shall be controlled by a manual-on vacancy sensor or a dimmer. Lighting in detached storage buildings less than 1,000 square feet located on a residential site are exempt from this requirement.

Common Enclosed Areas – Non-dwelling spaces such as interior hallways, pool houses, club houses, and laundry rooms in buildings with 4 or more units.

- All interior permanently installed luminaires shall be high efficacy or shall be controlled by an occupant sensor.

Parking Lots and Garages:

- Lighting for parking lots and carports serving seven or fewer cars must meet the residential outdoor lighting requirements as applicable.
- Lighting for parking garages either attached to or detached from the dwelling units serving seven or fewer cars shall meet the residential indoor lighting requirements.
- Lighting for parking lots, carports and garages with total of eight or more spaces shall comply with Nonresidential requirements (Sections, 130, 131, 132, 134, 146, and 147)

Outdoor Lighting – Includes patios, porches, balconies and entrances in buildings with 4 or more units, but does not include luminaires in and around swimming pools and water features.

- Permanently installed luminaires shall be high efficacy or shall be controlled by a motion sensor in combination with one of the following three devices that do not have an override or bypass switch that disables the motion sensor: a photocontrol, an astronomical time clock, or an Energy Management Control System.

Night Lights: Permanently installed night lights and night lights integral to a permanently installed luminaire or exhaust fan shall meet one of the following conditions:

- Shall contain only high efficacy lamps and not contain a line-voltage socket or line-voltage lamp holder
- Shall be rated to consume no more than 5 watts of power as determined by Section 130(d) and not contain a medium screw-based socket.

Exhaust fans – Lighting integral to exhaust fans in rooms other than kitchens shall meet the applicable requirements of Section 150(k). An exhaust fan housing is not required to be certified airtight but shall be sealed with a gasket or caulk between the exhaust fan housing and the ceiling.

INSPECTION: The permit holder must arrange for the following inspections.

1. Rough Electrical
2. Final Inspection – **In order to be valid, the permit must be finalized.**

NOTES: 1. Replacement of parts of an existing luminaire, including installing a new ballast or new lamp, without replacing the entire luminaire is not subject to these requirements

The California Energy Commission provides a list of links to additional information about residential lighting:

Residential Lighting Design Guide from the California Lighting Technology Center www.CLTC.ucdavis.edu

Advance Lighting Guidelines from the New Buildings Institute www.newbuildings.org

International Association of Lighting Designers www.iald.org/index

National Council on Qualifications for the Lighting Professions www.ncqlp.org

Lighting Research Center's National Lighting Product Information Program www.lrc.rpi.edu/programs/nlpi

California Building Industry Institute www.thebii.org